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(54) ACTIVE CAPILLARY AND MANUFACTURING OF THE SAME

(57) Abstract:

PROBLEM TO BE SOLVED: To provide an active capillary of a simple structure, having a torsional rotating motion mechanism, an expanding and retracting motion mechanism, a bending motion mechanism and a hardness adjusting mechanism, and capable of being easily thinned and loading a number of soft wirings, and to provide its manufacturing method.

SOLUTION: An active capillary comprises a bending motion mechanism part A mounted on a J-shaped curved part, a torsional rotating motion mechanism part B connected to the

bending motion mechanism part A and mounted near the root of the curve of the J-shape, and an expanding and retracting motion mechanism part C connected to the torsional rotating motion mechanism part B and mounted on a straight part of the J-shape, connected to the expanding and retracting motion mechanism part C, and an inner tube 3 inserted into a clearance formed inside of these mechanism parts A, B, C and D, the active pillar is totally covered by an outer tube 4 such as a thin silicon tube, and the inner tube 3 is called a working channel.

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